

# California Energy Commission's Quarterly Report Regarding the Renewable Energy Program

(April 1 – June 30, 2001)

The California Energy Commission is pleased to submit its Quarterly Report on the Renewable Energy Program, covering the period April 1 through June 30, 2001.<sup>1</sup> The report describes the Energy Commission's implementation activities, including information regarding awards submitted to the State Controller<sup>2</sup> for payment, the cumulative commitment of claims by account, the relative demand for funds by account, a forecast of future awards, and related matters.

## Background

Assembly Bill 1890 ([AB 1890] Chapter 854, Statutes 96) required California's three major investor-owned utilities to collect **\$540 million** from their ratepayers over a four-year period (1998-2002) to help support renewable electricity-generation technologies and develop a renewable market. As mandated by AB 1890, the Energy Commission submitted its ***Policy Report on AB 1890 Renewables Funding (Policy Report)*** to the Legislature in March 1997, with recommendations for allocating and distributing these funds. Senate Bill 90 ([SB 90] Chapter 905, Statutes 97) subsequently established a Renewable Resource Trust Fund, placed the \$540 million into the fund, and directed the Energy Commission how to distribute the fund through four distinct accounts consistent with the ***Policy Report***. These accounts and the total funds allocated to each are as follows:

- Existing Renewable Resources Account (**\$243 million**)
- New Renewable Resources Account (**\$162 million**)
- Emerging Renewable Resources Account (**\$54 million**)
- Customer-Side Renewable Resources Purchases Account:
  - Customer Credit Subaccount (**\$75.6 million**)
  - Consumer Education Subaccount (**\$5.4 million**)

In January 1998, consistent with SB 90, the Energy Commission adopted overall funding guidelines, eligibility requirements, yearly allocations, and account-specific guidelines to assist participants in applying for funding from the various accounts within the Program.

## Renewable Energy Program Implementation

The mechanisms for distributing funds vary by account, as do the implementation activities for each account. Table I highlights the Energy Commission's implementation activities for the second quarter of 2001 and describes the expected funding and implementation activities for the third quarter of 2001.

<sup>1</sup> Public Utilities Code (PUC), Article 5, Section 445(g) requires the Energy Commission to report to the Legislature quarterly on fiscal and programmatic aspects of the program.

<sup>2</sup> As a procedural matter, the Energy Commission submits awards directly to the State Controller for payment, rather than through the Treasurer.

**Table I**  
**Renewable Energy Program:**  
**Second Quarter 2001 Program Implementation**

Account, Program-Implementation, and Funding Activities: April – June 2001	Expected Funding and Implementation Activities: July – September 2001
<b>Existing Account</b>	
<ul style="list-style-type: none"> <li>• A total of 370 facilities are registered as renewable suppliers, and 264 facilities are eligible for funding.</li> <li>• No payments were made to any of the projects in Tiers 1, 2 or 3 for the months of February, March, and April 2001.</li> <li>• A reallocation of \$40 million in rollover funds was approved in order to fund a third auction under the New Account.</li> <li>• Rollover of \$80.6 million for Tiers 1, 2, and 3, excluding the funds authorized for reallocation.</li> </ul>	<ul style="list-style-type: none"> <li>• No payments are expected to be made in the third quarter of 2001.</li> <li>• The rollover will continue to increase.</li> </ul>
<b>New Account</b>	
<ul style="list-style-type: none"> <li>• Three additional projects came on-line; 19 projects are currently producing energy.</li> <li>• To date, payments totaling \$8.125 million have been made to 10 on-line facilities for 671 million kWh of new renewable energy generation.</li> <li>• Payments totaling \$1.8 million were made this quarter.</li> <li>• A Notice of Auction for the program's third auction was released on June 13, 2001.</li> </ul>	<ul style="list-style-type: none"> <li>• Construction of projects will continue, as will payments to on-line facilities.</li> <li>• Sixteen additional projects, totaling 56.5 MW of capacity, are scheduled to come on-line by September 30, 2001.</li> <li>• Bids for the third auction are due August 8, 2001.</li> </ul>
<b>Emerging Account</b>	
<ul style="list-style-type: none"> <li>• Funds encumbered for Buydown Program reservation requests currently total \$24.6 million.</li> <li>• To date, payments for installed systems total \$9.1 million.</li> <li>• Received 1,014 new reservation requests this quarter.</li> <li>• Monitoring program jointly funded by the Energy Commission and Department of Energy was completed.</li> </ul>	<ul style="list-style-type: none"> <li>• A draft analysis of supply-side constraints is scheduled for completion in early July.</li> <li>• An on-line reservation process is expected to be available in early July.</li> <li>• Electric rate hikes for SCE and PG&amp;E customers and an increase in the Buydown Program's rebate amount are likely to result in additional reservation requests.</li> </ul>
<b>Customer Side Account</b>	
<b>Customer Credit Subaccount</b>	
<ul style="list-style-type: none"> <li>• Twenty-nine active marketers are registered as renewable providers, offering a total of 47 products containing renewable energy. Only seven marketers, however, were serving customers.</li> <li>• One new wholesaler registered with the program, and another dropped out this quarter, for a total of four registered wholesalers.</li> <li>• To date, \$54 million has been paid to providers.</li> </ul>	<ul style="list-style-type: none"> <li>• Expenditures will decline as providers return their customers to utility service, and as additional marketers are expected to exit the market.</li> <li>• The Energy Commission will re-set the current credit level of 1.0 cent/kWh.</li> </ul>
<b>Consumer Education Subaccount</b>	
<ul style="list-style-type: none"> <li>• Grant awards were approved for five winners of a second grant solicitation, providing \$620K for renewable energy consumer outreach/education.</li> <li>• Continued payments to technical support contractors for various activities.</li> <li>• Selected a winning bidder in response to the contract solicitation for a public awareness campaign.</li> <li>• Technical support contractor (JHME) implemented a \$166K marketing campaign to promote the Emerging Account's Buydown Program.</li> </ul>	<ul style="list-style-type: none"> <li>• Work will begin on five new grant projects for renewable energy consumer education activities.</li> <li>• Initiate contract with the winning bidder of the public awareness campaign solicitation.</li> <li>• Co-sponsor and exhibit at Solfest 2001, an annual renewable energy and environmental fair in Hopland in August.</li> <li>• Continue payments to ongoing grant projects.</li> </ul>

## Renewable Resources Trust Fund Expenditures

Through June 30, 2001, the Renewable Resource Trust Fund has *received* a total of \$412.8 million for all of the accounts. As of the second quarter of 2001, the Energy Commission has awarded a total of \$205.3 million, reflecting payments (disbursements) from all of the accounts. Eligible applicants have *reserved* \$161.2 million, reflecting fund reservations (encumbrances) from the New Account, the Emerging Account, and the Consumer Education Subaccount. Table II shows a financial summary of the Renewable Resources Trust Fund as of the second quarter of 2001, reflecting cumulative funding and expenditures since the beginning of the Program, and those that occurred during the second quarter of 2001.

**Table II**  
**Renewable Resource Trust Fund**  
**Current Funding and Expenditures as of the Quarter Ending June 30, 2001**  
**(\$ millions)**

	Existing Account	New Account	Emerging Account	Customer-Side Account Customer Credit	Consumer Education	Program Total
<b>Available Funds</b>	<b>196.068</b>	<b>110.760</b>	<b>54.675<sup>3</sup></b>	<b>47.280</b>	<b>3.968</b>	<b>412.763<sup>4</sup></b>
<b>Total Disbursements</b>	<b>(132.733)</b>	<b>(8.126)</b>	<b>(9.110)</b>	<b>(54.094)</b>	<b>(1.280)</b>	<b>(205.343)</b>
Second Quarter 2001 Disbursements	0.000	(1.801)	(1.555)	(2.059)	(0.074)	(5.489)
<b>Intrafund Transfers</b>	<b>0.000</b>	<b>(6.814)<sup>5</sup></b>	<b>0.000</b>	<b>6.814</b>	<b>0.000</b>	<b>0.000</b>
<b>Intrafund Reallocations</b>	<b>(40.000)<sup>6</sup></b>	<b>40.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
<b>Current Balance</b>	<b>23.335</b>	<b>135.820</b>	<b>45.565</b>	<b>0.000</b>	<b>2.688</b>	<b>207.420</b>
<b>Encumbrances</b>	<b>0.000</b>	<b>(135.820)<sup>7</sup></b>	<b>(24.609)<sup>8</sup></b>	<b>0.000</b>	<b>(0.809)</b>	<b>(161.238)</b>
<b>Unexpended Funds</b>	<b>23.335</b>	<b>0.000</b>	<b>20.956</b>	<b>0.000</b>	<b>1.879</b>	<b>46.182</b>

The three investor-owned utilities continue making deposits into the Fund with payments current to June 30, 2001. The Program design has a built-in, two-month processing period for payments to eligible energy in several accounts.

As Table II reflects, in the second quarter of 2001 the State Controller made payments from the Customer Credit Subaccount to providers of renewable energy, and from the

<sup>3</sup> AB 29X ordered the transfer of \$15 million from the General Fund to the Emerging Account.

<sup>4</sup> Available funds include \$12,211 in voluntary contributions.

<sup>5</sup> At this time, the Customer Credit Subaccount is borrowing \$6.814 million from the New Account. The funds will be repaid later in the Program.

<sup>6</sup> To date, the Energy Commission has reallocated \$40 million from the Existing Account to the New Account, and authorized the reallocation of an additional \$40 million.

<sup>7</sup> The Energy Commission conditionally allocated \$162 million at its June 1998 auction, and \$40 million at its December 2000 auction. Funds are encumbered for projects as they become available.

<sup>8</sup> Reservation requests granted (but not yet paid) since the March 20, 1998 start-up of the Buydown Program.

Emerging Account to recipients of the Buydown Program. Payments were also made from the New Account to nine of the 16 projects that are now on-line and generating renewable energy, and from the Consumer Education Subaccount to grant award recipients for emerging renewables education activities. The Energy Commission encumbered funds from the Emerging Account for systems participating in the Buydown Program, the Consumer Education Subaccount for grant project activities and the Renewable Energy Public Awareness campaign contract, as well as from the New Account for 69 projects with funding award agreements from the first and second auctions. Funding for these projects will eventually total up to \$202 million; funds from the New Account will continue to be reserved as funding becomes available.

### **Existing Account**

As expected, because of continued high short-run avoided cost (SRAC) prices during the second quarter of 2001, no incentive payments were made to any facilities. Although SRAC prices have dropped slightly over the last few months, they are expected to stay above 5.0 cents per kilowatt-hour (cents/kWh) throughout the third quarter of 2001 and will likely remain high as long as natural gas prices continue to stay above normal. As a result of these high SRAC prices, no payments will be made to any facilities in Tiers 1, 2, or 3 during the third quarter of 2001. Unless a significant change in the current SRAC price trend occurs, facilities are not likely to receive any additional payments before the end of the Existing Account program in December 2001.

The rollover amount increased by an additional \$11 million this quarter and currently stands at nearly \$81 million. Based on conservative projections, this amount will increase to \$91 million by the end of the third quarter and \$105 million by the end of the year.<sup>9</sup> The rollover is the amount of money that is available in the Existing Account but has not yet been paid out to facilities. Any funds that are not paid in one month are added to the following month's allocation and made available for that month's payment cycle. As long as no payments are made to facilities, the rollover amount will continue to increase.

These available funds will be used in a separate area of the Renewable Energy Program; to date, the Energy Commission has authorized the reallocation of up to \$80 million in Existing Account rollover funds to the New Account in order to fund the results of two additional auctions. In the first quarter of 2001, up to \$40 million in rollover funds was reallocated to the New Account in order to fund the results of a second auction. This quarter, for purposes of funding a third New Account auction, the Energy Commission authorized the reallocation of an additional \$40 million to the New Account from the rollover funds. The actual transfer of funds will occur at a later date, after the auction has been held but before the winning projects are on-line and eligible to begin receiving payments.

The Energy Commission will determine at a later date the actual amount of funding needed to fully fund winning bids from the second and third New Account auctions. This figure may not be known for several months because it is possible that auction

<sup>9</sup> These figures do not account for the rollover funds (up to \$80 million) that the Energy Commission has authorized for reallocation to the New Account for purposes of funding two additional auctions.

winners could drop out, qualify for additional incentives, or have their funding awards under the auction either reduced or canceled.

During the second quarter of 2001, five biomass plants totaling 92 MW in capacity that were previously shut down – some for as long as five or six years – started generating electricity once again. Two more plants are expected to restart sometime during the next quarter. The added generation is timely as California continues to be in dire need of additional power during these summer months.

### **New Account**

Three additional projects – two small hydro facilities totaling 11.25 MW and one 1.2 MW landfill gas facility – came on-line this quarter. These projects participated in the New Account's second auction, which was specifically designed to fund projects that could follow an expedited schedule and begin generating energy before the end of 2001, preferably before the beginning of the summer.

Out of the 69 projects that won funding awards from either the first or second New Account auctions, a total of 19 have begun producing energy. These projects are currently contributing 132 MW of new renewable energy capacity to California's energy supply. By the end of this summer (September 30, 2001), an additional 16 projects totaling 56.5 MW in capacity are expected to come on-line. The remaining 34 projects are in various stages of development.

To date, seven landfill gas facilities totaling 23 MW of capacity, two geothermal projects totaling 60 MW, and one 16.5 MW wind project have received \$8.124 million in payments for approximately 671 million kWh of new renewable generation. The remaining nine facilities are technically on-line but have not yet submitted payment invoices to the Energy Commission. These nine projects include two biomass projects totaling 11.3 MW of capacity, four landfill gas projects totaling 7.64 MW, two small hydro facilities totaling 11.25 MW, and one 2.1 MW wind project.

The solicitation document for a third auction (Notice of Auction #6-01-3) was publicly released on June 13, 2001. The guidelines for the third auction are similar to those of the second auction, including the amount of available funds (\$40 million) and the bonus/penalty system for when the projects come on-line. As with the second auction, projects are expected to follow an expedited schedule.

Bids for funding awards from the third auction are due to the Energy Commission by August 8, 2001, and winning projects are scheduled to be announced on September 5, 2001. The funding for the results of this auction, up to \$40 million, will be transferred from the Existing Account's rollover funds at a later date, after the auction has been held.

### **Emerging Account**

The Buydown Program has received 2,672 reservation requests since it began on March 20, 1998, including 1,014 new requests during the second quarter of 2001. In comparison, one year ago, during the second quarter of 2000, only 42 requests were received.

The escalation in the number of reservation requests received by the Buydown Program is primarily a result of California's current energy crisis, as residents and businesses are becoming increasingly interested in securing a reliable and cost-predictable energy source. Also, in April 2001, the passage of AB 29X authorized an increase in the rebate amount to the lessor of \$4.50 per watt or 50 percent of system costs, which served as additional encouragement to parties that are eligible to participate in the Buydown Program.

Along with increasing the rebate amount, AB 29X appropriated an additional \$15 million from the General Fund to the Buydown Program, and ordered the Energy Commission to transfer \$15 million from another account to the Emerging Account, in order to provide more funds to the Buydown Program. This transfer will occur at a later date, when it is more apparent where the funds will come from.

Currently, \$24.6 million is encumbered for projects with reservation requests, and the State Controller has paid approximately \$9.1 million to completed projects. The total amount of encumbered funds does not include about 179 reservation requests received during the second quarter of 2001, which are still in various stages of the review process and have not yet received approval for funding.

Reservation requests are expected to continue to increase exponentially in future months as a result of the aforementioned reasons, along with the upcoming rate increase in the PG&E service territory, and the anticipated rate increases for customers who receive energy from SCE and various local municipalities.

In anticipation of the continued escalation in reservation activity, the Emerging Account staff developed an on-line reservation process, which is likely to become available in the beginning of July 2001.

Other Emerging Account activities during the second quarter of 2001 include those carried out by technical support contractor Regional Economic Research, Inc. (RER).

- Completion of a monitoring program of photovoltaic (PV) and small wind generating systems, jointly funded by the Energy Commission and the Department of Energy.
- Work authorizations with RER and ENDECON are ongoing, including additional troubleshooting of under-performing systems, developing a technical manual for PV systems, additional training sessions for building officials, and quality control assistance for retailers/installers.

### **Customer Credit Subaccount**

In the second quarter of 2001, the direct access market for renewable energy continued to decline in response to California's ongoing energy crisis. Although this decline began at the close of the fourth quarter of 2000, it is not yet fully reflected in the status of the Customer Credit Subaccount largely because of the lag between market activity and when the providers report their monthly sales to the Energy Commission.

An indicator of market activity for the Customer Credit Subaccount is the number of providers that are registered with the program. The number of registered providers held steady from last quarter at 29. One new product was registered, bringing the total to 47 registered products. The number of registered wholesalers remains at four, but one wholesaler dropped out and another was added to the program.

The number of registered providers does not fully reflect market activity, since providers can register with the Energy Commission before they serve electricity to customers, and since suspending or otherwise changing a provider's registration status is essentially voluntary in the event that they exit the market. A more accurate reflection of market activity is depicted through the number of providers registered and actively serving customers.

By the close of the first quarter of 2001, only nine providers continued to serve customers and had not stated that they were planning to exit the market. As of the close of this quarter, only seven providers continue to serve customers. Of these, only about four are expected to remain in the market through the third quarter of 2001.

It is important to note that the providers that are expected to remain in the market have shed some, or nearly all, of their total energy load. Moreover, only one provider is accepting new customers, and only on a very limited basis.

As expected, payments to large customers that are not residential or small commercial reached the \$15 million cap this quarter on the amount of funds that they may receive collectively and cumulatively over the course of the program. Funding is no longer available for non-residential and non-small commercial customers.

To date, the State Controller has paid approximately \$54 million to registered renewable providers. This quarter, because allocations to the Subaccount were higher than disbursements, the amount of funds the Subaccount must repay to the New Account became smaller (from \$10.215 in the first quarter of 2001 to \$6.814 million this quarter). The Customer Credit Subaccount staff expects that this trend of decreasing disbursements to providers will continue through the close of year 2001.

The credit level is currently set at 1.0 cent per kWh. Next quarter, the Energy Commission will re-set the credit level for the six-month period from July through December 2001.

### **Consumer Education Subaccount**

During the second quarter of 2001, staff continued to manage seven grant projects for consumer education and outreach activities for the emerging renewable technologies market. Payments totaling approximately \$74K were made for activities for which invoices were received during this period.

Highlights of grant project activities completed during this period include:

- Articles on emerging renewable technologies were featured in several publications, including the *Chico News and Review*, the *California Journal*, *Solar Today*, the *Sacramento Bee*, and the Local Government Commission's *Currents Newsletter*.
- A brochure on the Emerging Buydown Program was developed for local governments.
- Five co-ops began installing PV panels on five stores located in Davis, Grass Valley, Arcata, Santa Monica and Ocean Beach.
- Web content developed for the [www.consumerenergycenter.org](http://www.consumerenergycenter.org) site was made accessible from the Energy Commission's Web Site.
- San Diego Regional Energy Office developed draft content for its PV Web Site.
- An outline was developed for the Small Wind Consumer Buying Guide.

An update of the *Renewable Energy Consumer Education Marketing Plan* is still on hold pending the outcome of several renewable energy bills, which are currently being considered by the California Legislature. The *Marketing Plan* will be updated to incorporate experience that has been gained since its implementation, as well as to adjust for subsequent changes in the renewable energy market. When completed, the revised *Marketing Plan* will optimize flexibility and responsiveness to opportunities and changes in the renewable energy market.

In February 2001, the Energy Commission released a second grant Program Opportunity Notice, offering up to \$620K in grant funding for consumer education outreach activities for the renewable energy market. On June 13, 2001, the Energy Commission approved five grant awards. The five award-winning projects will provide information to consumers about renewable energy and emerging renewable generation technologies, their environmental benefits and the opportunities for installing emerging renewable systems in California.

The Consumer Education staff and the Energy Commission's Grants & Loans Office are preparing the grant agreements; projects are expected to begin in July. A summary of the approved grant projects and their sponsors follows:

- Educators for the Environment will develop a teacher's guide and classroom activities that focus on electricity from renewable energy for Grades 6 -12.
- Scott Cronk will create "This Renewable House," a half-hour PBS show with a format similar to "This Old House."
- The Rarus Institute will facilitate the installation of PV on school buildings and develop teacher resource kits that will include videos, lesson plans, lab equipment and seminars.
- The American Wind Energy Association will develop a targeted small wind energy marketing campaign.
- The Local Government Commission will stimulate the implementation of renewable energy technologies on local government facilities.

On June 27, 2001, the Energy Commission approved a contract for approximately \$2 million with ICF Consulting, Inc., the winning bidder in response to the Renewable Energy Public Awareness Campaign contract solicitation. ICF will develop and implement a statewide campaign to increase consumer awareness and purchases of



renewable energy and emerging renewable technologies. It is anticipated that initial campaign activities will begin in August 2001.

A number of technical support subcontractors are receiving funding from the Consumer Education Subaccount for activities relating to emerging renewable energy technologies and the Emerging Renewables Buydown Rebate Program.

One of these activities includes the development of three loan fact sheets for residential, commercial, and institutional sectors in support of the Buydown Program. REDI, a financing firm and technical support subcontractor, is developing the fact sheets in conjunction with RER, a technical support contractor. The fact sheets, which will provide a summary listing of available consumer loan programs, will be distributed at appropriate events and posted on the Energy Commission's Web Site.

Another activity is being conducted by JHME, a marketing firm and technical support subcontractor that is implementing a \$166,485 marketing campaign in support of the Emerging Renewables Buydown (Rebate) Program. JHME will develop campaign materials and incorporate them through paid advertising and public relations. On June 28, 2001, JHME conducted and staff observed two focus groups in Sacramento. Consumer outreach activities will begin in late July 2001.

In summary, the Energy Commission continues to make excellent progress in implementing the Renewable Energy Program. We expect Program disbursements of the Renewable Resource Trust Fund to increase in the third quarter of 2001.